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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

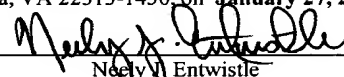
In re application of:)	
Shing Mark Lin)	Art Unit: 2112
Application Number: 09/687,699)	Examiner: Huynh, Kim T
Filed: 10/12/2000)	Attorney Docket: ADAPP171
Title: <u>Method and Apparatus for Device Discovery</u>)	Date: January 27, 2005

Mail Stop Petition

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

CERTIFICATE OF MAILING (37 CFR 1.8(a))

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on **January 27, 2005**

Signed: 
Neely V. Entwistle

PETITION TO WITHDRAW HOLDING OF ABANDONMENT UNDER 37 CFR 1.181(a)

Dear Sir:

The above-identified application became abandoned for failure to file a timely reply to an office action by the United States Patent and Trademark Office (USPTO). However, the Applicants submit that a reply was timely filed on June 2, 2004, and the Applicants received a postcard receipt from the USPTO that properly identified the reply. This petition is accompanied by copies of the postcard receipt and reply filed on June 2, 2004. The postcard receipt is *prima facie* evidence that Applicants timely filed the reply and, accordingly, Applicants hereby petition under 37 CFR 1.181(a) to withdraw holding of abandonment based on evidence that a reply was timely filed.

The Applicants submit that this petition does not require a petition fee. However, if a petition fee is required to facilitate the filing of this petition, please charge such fees to deposit account no. 50-0805 (Order No. ADAPP171). A copy of this petition is enclosed.

Respectfully submitted,
MARTINE & PENILLA, LLP



Michael K. Hsu, Esq.
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Customer Number 25920



PATENT POSTCARD

Docket No. **ADAPP171** Appln. No. **09/687,699** Date: **June 2, 2004**
By: **MH:ne** Filing Date: **October 12, 2000** Express Mail No.:
Inventor(s): **LIN et al.**
Title: **METHOD AND APPARATUS FOR DEVICE DISCOVERY**

The following has been received in the U.S. Patent & Trademark Office on the date stamped below:



Amendment Transmittal (1 page, in duplicate)
Amendment (10 pages)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of:

LIN et al.

Application No: 09/687,699

Filed: October 12, 2000

For: METHOD AND APPARATUS FOR DEVICE
DISCOVERY

Group Art Unit: 2112

Examiner: Huynh, Kim T.

Atty. Docket No: ADAPP171

Date: June 2, 2004

☐ Duplicate for
fee processing
Commissioner for Patents
Alexandria, VA 22313-1450**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box. 1450, Alexandria, VA 22313-1450 on June 2, 2004.

Signed: _____

Michael K. Hsu

Sir:

Transmitted herewith is an Amendment in the above-identified application.
The fee has been calculated as shown below.

	Claims Remaining After Amendment	Highest Previously Paid For	Present Extra	SMALL ENTITY RATE FEE	OR	LARGE ENTITY RATE FEE
TOTAL CLAIMS	15 -	20	0	X09 = \$	OR	X18 = \$
INDEP CLAIMS	03 -	03	0	X43 = \$	OR	X86 = \$

[] Multiple Dependent Claim Present
and Fee Not Previously Paid

\$145

\$290

TOTAL

\$ _____

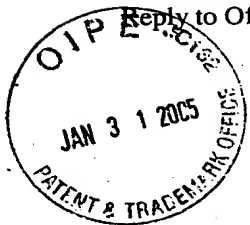
\$ 0

- ☐ Applicant hereby petition for a _____ month extension of time to respond to the outstanding Office Action.
- ☒ Applicant believes that no Extension of Time is required; however, if it is determined that such an extension is required, Applicant hereby petitions that such an extension be granted and authorize the Commissioner to charge the required fees for an Extension of Time under 37 CFR 1.136 to Deposit Account No. 50-0805
- ☐ Enclosed is our Check No. _____ in the amount of \$ _____ to cover the extension of time fee.
- ☒ If the required fees are missing or any additional fees are required to facilitate filing the enclosed response, please charge such fees or credit any overpayment to Deposit Account No. 50-0805 (Order No. ADAPP171). A copy of this sheet is enclosed.

Respectfully submitted,
MARTINE & PENILLA, LLP

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Telephone: (408) 749-6900
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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of:)
Lin et al.) Group Art Unit: 2112
Application No.: 09/687,699) Examiner: Huynh, Kim T
Confirmation No.: 7677) Atty. Docket No: ADAPP171
Filed: October 12, 2000) Date: June 2, 2004
For: METHOD AND APPARATUS FOR)
DEVICE DISCOVERY)

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on June 2, 2004.

Signed: _____

Michael K. Hsu

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

AMENDMENT

Dear Sir:

Applicants submit this paper in response to the Office Action mailed March 2, 2004.

Applicants request reconsideration of the subject application in light of the following:

Amendments to the claims are reflected in the Listing of Claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 7 of this paper.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claim 1 (currently amended): A method for providing device type information using a Fibre Channel network, comprising the operations of:

obtaining device type information for a device coupled to a Fibre Channel based network;

constructing an address database having a device entry for the device, wherein the device entry includes a SCSI port target identifier and a logical unit identifier, and wherein the device entry associates the device type information with the SCSI port target identifier and the logical unit identifier and associates an Arbitrated Loop Physical Address (AL_PA) with the SCSI port target identifier and the logical unit identifier;

receiving a request for the device type information, wherein the request includes the SCSI port target identifier and the logical unit identifier; and

returning the device type information associated with the SCSI port target identifier and the logical unit identifier,

wherein the address database facilitates translation of operating system independent commands received by a Fibre Channel wrapper module into Fibre Channel commands usable by a Fibre Channel layer module that is in communication with a Fibre Channel controller.

Claim 2 (canceled)

Claim 3 (currently amended): A method as recited in claim 1, further comprising the operation of returning the AL_PA associated with the SCSI port target identifier and the logical unit identifier in response to the request.

Claim 4 (original): A method as recited in claim 1, wherein the request is in the form of a SCSI based Protocol Auto Configuration (PAC) command.

Claim 5 (original): A method as recited in claim 1, wherein the request is in the form of a SCSI based Probe command.

Claim 6 (currently amended): A method as recited in claim 1, further comprising the operation of performing a lookup operation to obtain the device type information associated with the SCSI port target identifier and the logical unit identifier utilizing the address database.

Claim 7 (canceled)

Claim 8 (currently amended): A system for providing device type information using a Fibre Channel network, comprising:

- a Fibre Channel based network;

- a device coupled to the Fibre Channel based network, the device having an associated Arbitrated Loop Physical Address (AL_PA); and

- an address database having a device entry for the device, wherein the device entry includes a SCSI port target identifier and a logical unit identifier associated with the device,

and wherein the device entry associates device type information with the SCSI port target identifier and the logical unit identifier and associates the AL_PA with the SCSI port target identifier and the logical unit identifier,

wherein the address database facilitates translation of operating system independent commands received by a Fibre Channel wrapper module into Fibre Channel commands usable by a Fibre Channel layer module that is in communication with a Fibre Channel controller.

Claim 9 (canceled)

Claim 10 (original): A system as recited in claim 8, further comprising a Fibre Channel driver having a Fibre Channel Common Hardware Interface (FCHIM).

Claim 11 (original): A system as recited in claim 10, further comprising a SCSI based application in communication with the Fibre Channel driver.

Claim 12 (currently amended): A system as recited in claim 11, wherein the SCSI based application passes a request for device type information to the Fibre Channel driver, the request including the SCSI port target identifier and the logical unit identifier.

Claim 13 (currently amended): A system as recited in claim 12, wherein the Fibre Channel driver returns the device type information based on the SCSI port target identifier and the logical unit identifier using the address database.

Claim 14 (currently amended): A computer program that provides device type information using a Fibre Channel network, comprising:

a code segment that obtains device type information for a device coupled to a Fibre Channel based network;

a code segment that constructs an address database having a device entry for the device, wherein the device entry includes a SCSI port target identifier and a logical unit identifier, and wherein the device entry associates the device type information with the SCSI port target identifier and the logical unit identifier and associates an Arbitrated Loop Physical Address (AL_PA) with the SCSI port target identifier and the logical unit identifier;

a code segment that receives a request for the device type information, wherein the request includes the SCSI port target identifier and the logical unit identifier; and

a code segment that returns the device type information associated with the SCSI port target identifier and the logical unit identifier,

wherein the address database facilitates translation of operating system independent commands received by a Fibre Channel wrapper module into Fibre Channel commands usable by a Fibre Channel layer module that is in communication with a Fibre Channel controller.

Claim 15 (canceled)

Claim 16 (currently amended): A computer program as recited in claim 14, further comprising a code segment that returns the AL_PA associated with the SCSI port target identifier and the logical unit identifier.

Claim 17 (original): A computer program as recited in claim 14, wherein the request is in the form of a SCSI based Protocol Auto Configuration (PAC) command.

Claim 18 (original): A computer program as recited in claim 14, wherein the request is in the form of a SCSI based Probe command.

Claim 19 (currently amended): A computer program as recited in claim 14, further comprising a code segment that utilizes the SCSI port target identifier and the logical unit identifier to lookup the device type information associated with the SCSI port target identifier and the logical unit identifier.

Claim 20 (canceled)

REMARKS/ARGUMENTS

Applicants thank the Examiner for his careful review of this application. Claims 1, 3-6, 8, 10-14, and 16-19 have been rejected. Claims 1, 3, 6, 8, 12, 13, 14, 16, and 19 have been amended. Applicants respectfully request reconsideration of the application in view of the above amendments and the following remarks submitted in support thereof.

Obviousness Rejections under 35 U.S.C. §103(a)

Pending claims 1, 3-6, 8, 10-14, and 16-19 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,463,498 to Wakeley et al. in view of U.S. Patent No. 5,954,796 to McCarty et al. As will be fully explained below, the combination of Wakeley et al. in view of McCarty et al. does not raise a *prima facie* case of obviousness against amended independent claims 1, 8, and 14.

Although the Applicants believe that the original pending claims are defined over the prior art of record, the Applicants have amended claims 1, 3, 6, 8, 12, 13, 14, 16, and 19 to clarify that a port target identifier is SCSI based. As a result, independent claims 1, 8, and 14 define a method, a system, and a computer program for constructing an address database including a device entry that associates an Arbitrated Loop Physical Address (AL_PA) with the SCSI port target identifier and a logical unit identifier. In addition, the address database facilitates translation of operating system independent commands received by a Fibre Channel wrapper module into Fibre Channel commands usable by a Fibre Channel layer module that is in communication with a Fibre Channel controller.

In response to the Applicants' argument, the Examiner noted that Wakeley et al. teach the association of the AL_PA with the port target identifier and the logical unit identifier because "AL_PA corresponds to the FC Port specification within the D_ID and S_ID" (see

Office Action mailed March 2, 2004 at page 9). Applicants respectfully traverse the Examiner's characterization of Wakeley et al. relative to amended independent claims 1, 8, and 14 because the portion of the reference relied upon by the Examiner (col. 18, lines 38-67) does not teach or suggest associating the AL_PA with the SCSI port target identifier and the logical unit identifier, as defined in amended independent claims 1, 8, and 14. In particular, at column 6, lines 61-66, Wakeley et al. disclose that the D_ID is an "FC address indicating the destination FC Port for the frame," and the S_ID is an "address that indicates the FC Port that transmitted the frame." As such, Wakeley et al. teach that the D_ID and the S_ID are FC addresses. Even the Examiner admitted that "[b]oth the D_ID (destinatin) [*sic*] and the S_ID(source) that specify a fabric address for a particular FC Port" (see Office Action mailed March 2, 2004 at page 9). In contrast, amended independent claims 1, 8, and 14 define the port target identifier to be SCSI based. As Wakeley et al. disclose FC addresses that are not based on SCSI, Wakeley et al. cannot reasonably be considered to teach or suggest a device entry that associates an Arbitrated Loop Physical Address (AL_PA) with the SCSI port target identifier and the logical unit identifier, as defined in amended independent claims 1, 8, and 14.

Furthermore, the Examiner also noted that Wakeley et al. teach the address database that facilitates the translation of operating system independent commands received by the Fibre Channel wrapper module into Fibre Channel commands. Applicants respectfully traverse the Examiner's characterization of Wakeley et al. relative to amended independent claims 1, 8, and 14 because the portion of the reference relied upon by the Examiner (Figure 3 and column 4, lines 42-51) does not teach or suggest the address database that facilitates translation of operating system independent commands received by the Fibre Channel wrapper module into Fibre Channel commands, as defined in amended independent claims 1,

8, and 14. Specifically, column 4, lines 42-51 merely discloses the functions of an FC Port. For example, "[t]he FC Port includes serial transmitter and receiver components coupled to a communications medium via a link that comprises electrical wires or optical strands" (col. 4, lines 48-51). The components and functions of the FC Port are not relevant and have nothing to do with the address database that facilitates translation of operating system independent commands received by the Fibre Channel wrapper module into Fibre Channel commands, as defined in amended independent claims 1, 8, and 14.

The Examiner also referred to item 3 of Figure 3 in support of the 35 U.S.C. §103(a) rejection. Here, Figure 3 merely shows the details of an FC frame. The FCP_LUN filed 330 is an address that is located in a data payload section 308. The data payload "contains the actual data packaged within the FC frame" (col. 7, lines 6-7). As such, Figure 3 teaches the packaging of SCSI data and commands, like FCP_LUN, FCP_CMND, etc., within the FCP frame. In contrast, independent claims 1, 8, and 14 teaches an address database that facilitates translation of operating system independent commands received by the Fibre Channel wrapper module into Fibre Channel commands. The FC frame disclosed in Wakeley et al. only packages SCSI data and commands and does not facilitate translation in any manner. Accordingly, Wakeley et al. cannot reasonably be considered to teach or suggest the address database that facilitates translation of operating system independent commands received by the Fibre Channel wrapper module into Fibre Channel commands, as defined in independent claims 1, 8, and 14.

To establish a *prima facie* case of obviousness, the prior art references must teach or suggest all the claim limitations (see M.P.E.P. §2143). Here, in view of the incorrect characterization of Wakeley et al., the references as combined do not teach all the features of the claimed invention. Since dependent claims 3-6, 10-13, and 16-19 directly or indirectly

depend from amended independent claims 1, 8, and 14. Applicants submit that the dependent claims are patentable under 35 U.S.C. §103(a) for the reasons set forth above. As a result, Applicants respectfully request the Examiner to withdraw the 35 U.S.C. §103(a) rejection for pending claims 1, 3-6, 8, 10-14, and 16-19.

Conclusion

In view of the foregoing, the Applicants respectfully submit that all the pending claims 1, 3-6, 8, 10-14, and 16-19 are in condition for allowance. Accordingly, a Notice of Allowance is respectfully requested. If the Examiner has any questions concerning the present Amendment, the Examiner is requested to contact the undersigned at (408) 749-6900 ext. 6924. If any additional fees are due in connection with filing this Amendment, the Commissioner is also authorized to charge Deposit Account No. 50-0805 (Order No. ADAPP171). A duplicate copy of the transmittal is enclosed for this purpose.

Respectfully submitted,
MARTINE & PENILLA, L.L.P.



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